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ABSTRACT

Between July 1978 and June 1980 a program evaluation was undertaken in Pennsylvania in order to measure compliance with state day care licensing regulations. The evaluation involved approximately 1000 licensed/approved child care centers and 50,000 children. Statistical data indicate that by the period April to June 1980 the statewide compliance percentage was well above 96%. Compliance in individual centers ranged from 63% to 100%. Although no significant statewide differences between private and public centers were found, there were slight regional differences. Approximately two-thirds of the centers completed evaluations in both fiscal years. Variation across regions again was found in the pretest to posttest comparisons, but all regional totals increased. The statewide increase in compliance was statistically significant. In the second fiscal year (1979 to 1980) a scoring protocol was implemented. Each questionnaire item had a weight assigned to it in order to measure relative risk to children. By the fourth quarter of the second fiscal year there were only eight (out of 275) items on which fewer than 90% of the programs were in compliance. The eight items were predominately in the child health component and involved screenings and immunizations in particular. Levels of non-compliance are reported for the following immunizations: DPT, Polio, Measles, Rubella, and Mumps. Correlations between unit cost and compliance level as well as between program size and compliance level also are reported. (Author/RH)

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A Measure of the Child Care Ecology: Day Care Program Compliance With State Regulations[1]

ED194183

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September 17, 1980

ABSTRACT

This is a study embedded in the child care ecology which focuses on child day care centers in the Commonwealth of Pennsylvania over a two year period. The study involved over 1000 centers and approximately 50,000 children. The study assessed program compliance with state regulations in the following areas: administration, environmental safety, child development program, nutrition, social services, transportation and health services. Also results are reported on cost and size of the day care program relating these data to compliance data. This study represents a new avenue in the assessment of the child care ecology.

It is a first attempt in the child care field at the state level in the use of a scoring protocol which measures relative risk to children in care. The evaluative approach used in this study is applicable to other child care settings and delivery systems, such as child welfare.

PS011745

This is a report of a program evaluation undertaken in Pennsylvania (Child Development Program Evaluation --CDPE) involving approximately 1000 licensed/approved child care centers and 50,000 children. These centers were publicly as well as privately funded. The report period is from July 1978 to June 1980.

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1 All results reported are from the Ecological Monitoring Information System (EMIS) and the Child Development Program Evaluation (CDPE) Instrument.

I would like to thank Karen Kroh and Dorothy Springer for their helpful comments on an earlier version of this manuscript.

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The program evaluation measured compliance with state day care/ licensing regulations in Pennsylvania. The regulations were grouped into seven categories: administration, nutrition, social services, transportation, health, child development and environmental safety.

Before giving a detailed breakdown of the data, there are statewide data which give an overall indication of compliance for all programs. When the CDPE project began in July 1978, the initial statewide compliance percentage for all sites measured in the first quarter (July-Sept 1978) was less than 85% compliance. By the last quarter of Fiscal year 78-79 (April-June 1979), CDPE evaluations showed a statewide compliance percentage for all programs of just below 90% compliance with regulations. By the last quarter of Fiscal year 1979-1980, (April-June 1980), the statewide compliance percentage was well above 96% compliance with state regulations. (See figure 1 for the total eight quarters and the respective percentages).

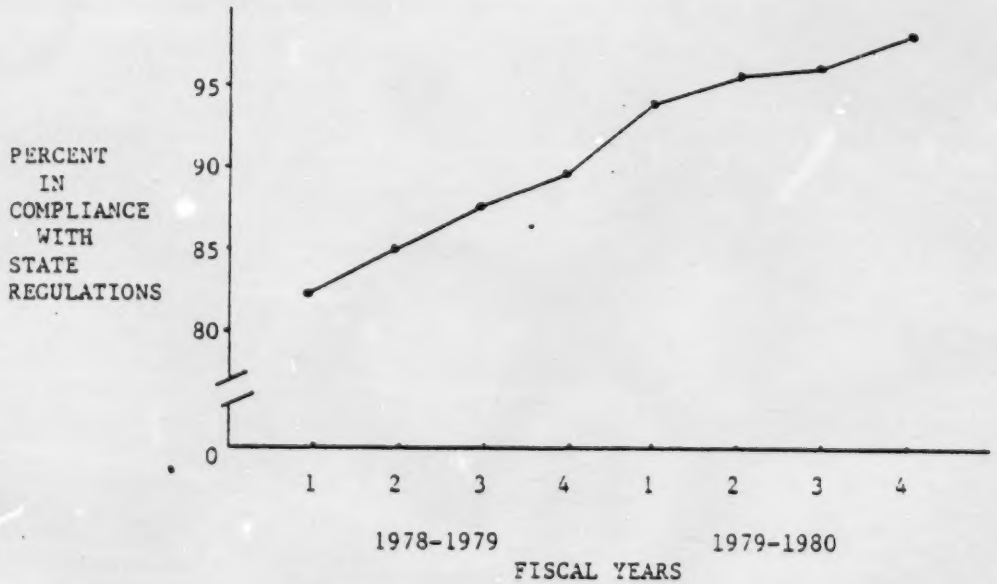

FIGURE 1

The range in percentages in individual centers was from a low of 63% to a high of 100% compliance level. Private as well as public centers were evaluated, and there was no significant difference between the two categories statewide; however, there were some slight regional differences.

Approximately two-thirds of the centers had a pre-post test administered. This means that a CDPE was completed both in 78-79, and then in 79-80. There again was variation across the regions, but all regional totals increased; it was just a matter of magnitude. Statewide the results were significant: in 78-79 the overall compliance percentage was approximately 88%; by the post-test in 79-80, the overall compliance percentage was over 95% ($t=5.34$; $p<.001$; $df=54$) (See figure 2 for the regional and statewide breakouts).

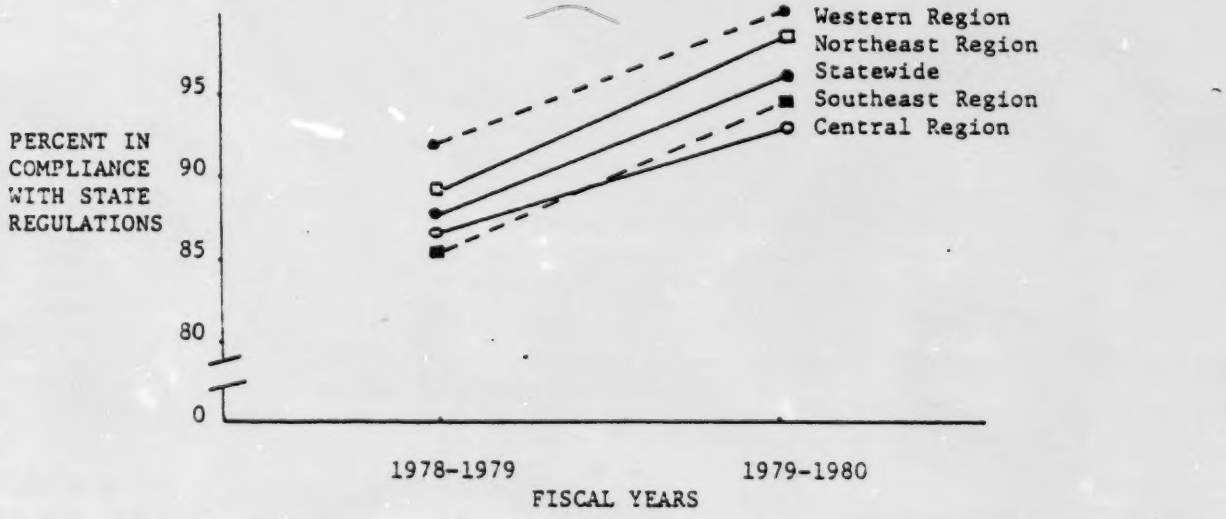

FIGURE 2

In Fiscal year 79-80, more detailed quarterly reports were begun where not only overall percent compliance was calculated but a scoring protocol was instituted experimentally.

This means that each item within the CDPE had a weight assigned to it. This weight measured relative risk to children. The final scores which are reported here are but a compilation of the individual weights assigned to each item that appears not in compliance.

When the scoring protocol was initiated in the first quarter of FY 79-80, the total scores for programs in the regions were: Northeast Region = 85; Southeast Region = 113; Central Region = 119; Western Region = 45. A higher score indicates a higher level of non-compliance.

In the fourth quarter of FY 79-80, the scores had a very different configuration regionally. Northeast Region =27.06; Southeast Region = 62.43; Central Region = 114.16 and Western Region = 16.63 (See Chart 1 for a more detailed quarterly display).

REGIONS	QUARTERS			
	1	2	3	4
NORTHEAST	85	67	72	27
SOUTHEAST	113	127	65	62
CENTRAL	119	124	103	114
WESTERN	45	18	21	17
STATEWIDE	92	84	65	55

CHART 1

Another approach for looking at the data is to analyze the scores for the seven component areas over the quarters.

That type of data was initiated in the second quarter of FY 79-80. Therefore, there are no figures for the first quarter of FY 79-80. For the second quarter and the third quarter of FY 79-80, the following were the scores by component areas: Administration went from a score of 42 in the second quarter to a score of 27 in the third quarter; Environmental Safety remained virtually unchanged at a score of 16; Child Development decreased slightly from a score of 2.41 to 1.72; Nutrition decreased from 1.02 to 0.54; Social Services decreased from 6.79 to 5.89 score; Transportation's score decreased from 1.95 to 1.71; and Health decreased from a score of 21 to 12. (See Chart 2 for more detailed data).

The administrative, social services and health components showed significant decreases which means the programs evaluated are coming more into compliance. All the other component areas either remained relatively static or changed positively in only a slight way.

	QUARTERS		
COMPONENT AREAS	2	3	4
ADMINISTRATION	42.28	27.39	23.54
ENVIRONMENTAL SAFE	16.26	16.55	15.04
CHILD DEVELOPMENT	2.41	1.72	1.38
NUTRITION	1.02	0.54	0.06
SOCIAL SERVICES	6.79	5.89	2.49
TRANSPORTATION	1.95	1.71	1.87
HEALTH	21.21	11.56	9.35

CHART 2

There were two other reports that were used in FY 79-80 that were not used as comprehensively in FY 78-79, although the first that is described did have its roots in FY 78-79. The first of these reports is a frequency report to determine the number of items that are out of compliance at a significant level (25% of the programs or greater being out of compliance on an individual item). In FY 78-79, there were 81 individual items within the CDPE that met the 25% criterion. By the first quarter of FY 79-80, there were only 13 individual items, that met the 25% criterion.

It was at this point that the criterion level was lowered from 25% to 10% which meant that on any individual item if only 10% of the programs were found out of compliance this would constitute being reported on the frequency report. As predicted, because of the more stringent criterion, the number of items went up to 17 individual items that met the new criterion for the 2nd quarter. By the third quarter the number was reduced to 14 individual items and by the fourth quarter it was down to only eight (8) individual items that met the stringent 10% crierion. This means that all other items (there are 275 individual items in the CDPE) are being complied with by greater than 90% of the programs, and, there are only 8 out of the 275 items <u>where less than 90% of the programs are in compliance</u>. (See Appendix 1)

The lowest levels of compliance (the eight items) are predominately in the child health component and involve screenings and immunizations in particular.

It was because of this particular problem that the following report was maintained. It was started in the 1st quarter of 79-80 because of the high levels of non-compliance with the immunization and screening items.

This last report is the Immunization Report and it gives the levels of non-compliance for the following immunizations: DPT, Polio, Measles, Rubella, and Mumps. These data are reported by individual site and are shared with the Pennsylvania Department of Health. The Immunization Division then follows up on the programs that are severely out of compliance.

In the First Quarter, 55% of the programs were substantially out of compliance with having the children in their care properly immunized. By the Fourth Quarter, 21% of the programs were substantially out of compliance. This is a marked improvement, but it still remains as one of our most difficult areas of compliance.

There were also some other results that did not become part of the usual reporting system but were one time special reports. In one of their special reports, CDPE data were cross-walked with fiscal and reporting data in the Title XX day care centers. Private day care centers are not included in the next set of data. Two very interesting relationships were evident which I will very briefly describe.

When the fiscal and CDPE data are crosswalked, very low priced programs were found to have very high scores indicating a high level of non-compliance.

As the unit costs increased for programs, the scores did gradually decrease which would be predicted. However, this relationship did not continue throughout the highest priced programs ($4,000 +/child/year). In fact with the highest priced programs the scores actully went back up again indicating a higher level of non-compliance. (See figure 3 for a graphic display of this phenomena).

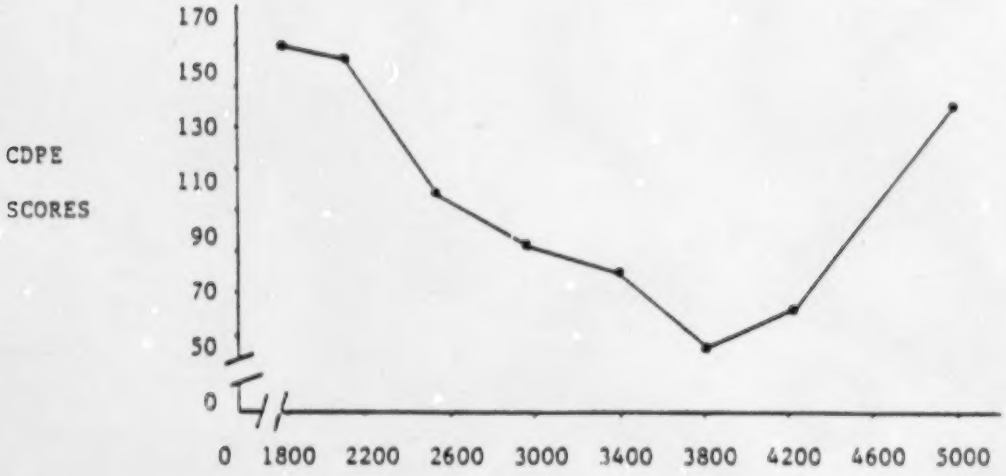

FIGURE 3

The other relationship occurred when CDPE scores and size of program data were crosswalked.

A similar type of relationship was found as in the crosswalk between fiscal and CDPE data but in this case the relationship was not as strong. The larger (400+children) and the smaller (less than 40 children) programs were found to have higher CDPE scores than the programs of moderate size (50-300 children).

This study reports on a project instituted in Pennsylvania that attempted to more objectively evaluate program compliance with state day care regulations. The scores are measures of risk factors that would potentially injure children in child care settings. They are a first attempt at measuring the quality of the child care environment.

CDPE FREQUENCY COUNTS--SUMMARY REPORT--1979-1980

ITEMS	QUARTERS		
	10-12/79	1-3/80	4-6/80
Written References (47)	65%	78%	74%
Child Health Appraisal (137)			
-Height and weight (d)	87%	90%	90%
-DPT (e)	89%	89%	95%
-Polio (f)	89%	87%	98%
-Measles (g)	90%	86%	98%
-Rubella (h)	87%	84%	92%
-Mumps (i)	81%	77%	81%
-Vision (j)	71%	81%	82%
Speech (k)	59%	76%	79%
-Hearing (l)	74%	80%	75%
Anemia (o)	58%	68%	61%
-Developmental (p)	74%	82%	74%
-Dental (q)	66%	81%	79%
Application Forms (158)			
-Physician (d)	79%	88%	97%
-Emergency Contact (e)	88%	90%	90%
-Health Insurance (f)	71%	80%	98%
-Signature of parent (g)	86%	90%	90%
Progress (163e)	80%	90%	90%
	I	II	III

I/II $t = 3.69$; $df = 17$; $p < .001$
II/III $t = 1.54$; n.s.

Appendix 1